

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

FF38

In re Inter Partes Reexamination)
Requests filed April 22, 2003 for)
Patent Nos.: 5,436,960; 5,479,472;)
5,438,611; 5,625,670; 5,631,946;)
5,819,172 and 6,067,451)



PETITION TO THE UNDERSECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE IN PERSON FROM A DECISION OF THE DIRECTOR OF THE OFFICE OF PATENT LEGAL ADMINISTRATION UNDER 37 C.F.R § 1.181

This is a petition to the Undersecretary Of Commerce For Intellectual Property And Director Of The United States Patent And Trademark Office (Director), in person, to review, under 37 C.F.R § 1.181, the highlighted one of seven substantially identical decisions, each dated June 6, 2003 (and supplemented on June 12, 2003), by the Director of the Office of Patent Legal Administration in each of the above identified matters holding that each of the above-identified Inter Partes Reexamination Requests are barred by section 4608 of the American Inventors Protection Act (AIPA).

Consideration by the Director in person is appropriate because the issues raised by this petition impact policies by which the Patent and Trademark Office will implement changes to Inter Partes Reexamination practice resulting from the 21st Century Department of Justice Appropriations Authorization Act.

BACKGROUND OF THE PETITION

On April 17, 2003, the undersigned, on behalf of Research in Motion filed 8 Requests for Inter Partes Reexamination, one for each of the above-identified patents and one for U.S. Patent 6,317,592. Each of the 8 patents is a member of a family of patents, related by substantially identical specifications, by overlapping chains of continuity and by common ownership. The claims of many of the patents are subject to a terminal disclaimer because they are obvious

variations of claims of others of the patents. The relationships of the patents to each other are shown in Figure 1 attached as Appendix A to this petition.

The above-identified Requests for Inter Partes Reexamination are related to five Director Initiated Reexaminations and to one 3rd Party requested Reexamination as follows:

<u>U.S. Patent No.</u>	<u>Reexamination No.</u>
5,436,960	90/006,533 (3 rd Party requested)
5,625,670	90/006,491 (Director Initiated)
5,631,946	90/006,492 (Director Initiated)
5,819,172	90/006,493 (Director Initiated)
6,067,451	90/006,494 (Director Initiated)
6,317,592	90/006,495 (Director Initiated)

On April 22, 2003, the PTO issued a notice in each of the above-identified *Inter Partes* Request for Reexaminations, holding that *Inter Partes* Reexamination Requests were improper as lacking jurisdiction by virtue section 4608 of the American Inventor's Protection Act. Section 4608 of the American Inventor's Protection Act (AIPA), which was not codified as part of Title 35, purports to limit Inter Partes Reexamination to only those patents "that issue ... from an original application filed in the United States on or after [the date of enactment—November 29, 1999]."

On June 24, 2003, Research in Motion filed Ex Parte Reexamination Requests corresponding to each of the above identified Requests for Inter Partes Reexamination, containing the same prior art used in the above-identified Inter Partes Reexamination Requests at the suggestion of the PTO. As of the time this is being composed, the undersigned has received a Notice of Reexamination Request Filing Date in only U.S. Patent 5,436,960. Based on that notice and on other publicly available information, the undersigned believes that the other Ex Parte Reexamination Requests have been assigned Reexamination numbers as follows:

<u>U.S. Patent No.</u>	<u>Reexamination No.</u>
5,436,960	90/006,675
5,438,611	90/006,676
5,479,472	90/006,677
5,625,670	90/006,678
5,631,946	90/006,679
5,819,172	90/006,680
6,067,451	90/006,681

On June 18, 2003, the PTO accepted an Inter Partes Reexamination request for U.S. Patent 6,317,592 and assigned it Reexamination No. 95/000,020.

On May 6, 2003, the undersigned filed a petition requesting withdrawal of the notice of April 22, 2003 in each of the above-identified Requests for Inter Partes Reexamination as improper because jurisdiction was, in fact, proper. The petition also requested alternative relief, namely (1) waiver of 37 C.F.R. §1.535(g) and §1.560 to permit Requestor to participate in Reexamination under 35 U.S.C. §301-§307, (2) that the Patent and Trademark Office order a Director Initiated Reexamination under 35 U.S.C. §313 and (3) deferral of the effective date for an election required by the Notice. [Note: 35 U.S.C. §313 was amended so that the requested alternative relief (2) is no longer appropriate.]

On June 6, 2003, the Director of the Office of Patent Legal Administration issued substantially identical decisions in each of the above-identified Inter Partes Reexamination Requests, respectively denying the petitions of May 6, 2003. On June 12, 2003, the Director of the Office of Patent Legal Administration issued substantially identical supplemental decisions denying the petitions of May 6, 2003.

REQUEST FOR RELIEF

This is a petition to the Undersecretary Of Commerce For Intellectual Property And Director of The United States Patent And Trademark Office (Director), in person, to review under 37 C.F.R. §1.181 substantially identical decisions, each dated June 6, 2003 (and supplemented on June 12, 2003), by the Director of the Office of Patent Legal Administration in each of the above identified matters holding that each of the above-identified Inter Partes Reexamination Requests are barred by section 4608 of the American Inventors Protection Act (AIPA).

The requested relief is appropriate under one or more of the following rationales: (1) that section 4608 of the AIPA has been repealed by implication, (2) that the PTO has inherent Constitutional authority to accept the above-identified Inter Partes Reexamination Requests, (3) that Petitioner has a right of appeal from adverse decisions in both Inter Partes and Ex Parte Reexamination Proceedings under the 21st Century Department of Justice Appropriations Authorization Act (PL 107-273) and that the only bar to participation in an Ex Parte

Reexamination Proceeding are rules that may be waived, and (4) that section 4608 of the AIPA is unconstitutional.

CONSEQUENCES OF DECISIONS

The position taken in the decision(s) by the Director of the Office of Patent Legal Administration with respect to Section 4608 of the AIPA has two extraordinarily serious consequences for the Patent and Trademark Office.

First, the position taken in the decision(s) by the Director of the Office of Patent Legal Administration with respect to Section 4608 prohibits the PTO from declaring, in an Inter Partes proceeding, claims from a parent application to be unpatentable even though they are not patentably distinct from claims in a continuing application. In the Requests for Inter Partes Reexamination under consideration in this petition, the PTO has accepted Inter Partes Reexamination status for U.S. Patent No. 6,317,592, even though the claims of many of the above-identified applications are acknowledged as patentably not distinct by the filing of a Terminal Disclaimer. See Figure 1, attached hereto as Appendix A. The interpretation of section 4608 of the AIPA taken by the Director of the Office of Patent Legal Administration is arbitrary because it leads to the absurd conclusion that the PTO can correct some claims through Inter Partes Reexamination while at the same time the PTO is helpless to correct claims in related applications that are acknowledged to be not patentably different.

Second, the position taken in the decision(s) by the Director of the Office of Patent Legal Administration with respect to Section 4608 effectively guts the applicability of Inter Partes Reexamination by limiting its applicability to only 3.9% of patents. As of June 6, 2003, approximately 6,574,798 patent numbers had been assigned. Only 261,646 of those, or 3.9% are eligible for Inter Partes Reexamination under the interpretation taken by the Director of the Office of Patent Legal Administration. Given the legislative history, described somewhat below, it would require an extraordinary leap to assume that a majority of both houses of Congress intended Inter Partes Reexamination to apply to only 3.9% of issued patents.

SECTION 4608 OF THE AIPA HAS BEEN REPEALED BY IMPLICATION

Old Inter Partes Reexamination Practice

Inter Partes Reexamination as provided by the American Inventors Protection Act (AIPA) was so ineffective that at the passage of HR1886¹, by the House of Representatives, Congressman Berman stated:

Currently the inter partes reexamination procedure places so many constraints on third-party requesters of such reexamination that, as some patent attorneys have stated, “It would be legal malpractice to recommend a client initiate an inter partes reexamination.”

Referring to passage of the American Inventor’s Protection Act of 1999, Congresswoman Mink said the following:

“Along with these concerns, I object to the speed, secrecy and convoluted method by which this bill has been slipped on to the floor late at night under suspension of the rules....

I find the manner in which this bill was brought to the House floor unacceptable.... Far from a lengthy informed process, H.R. 1907 makes its way to this chamber following a slippery, silent path which featured name changes, number changes, unpublished documents, and finally this evening an unpublished bill, finished only minutes before called up for approval....If it is a wonderful piece of Legislation and protects the rights of the small inventor why is it not open to more than the minimum debate and why can’t we hold hearings on this final version whose ink is not yet dry?

The judiciary committee marked up H.R. 1907 without the benefit of hearings; providing no public form for the stakeholders involved. This stark omission comes in spite of extensive controversy surrounding this issue in 105th congress. There is no published report on HR 1907 and until this evening, this House was scheduled to consider a patent bill almost half the length of HR 1907. I was expecting to debate HR 2654, and was shocked to find that HR 1907 was resurrected and had usurped its place. This is an appalling way to manage Legislation embodying such an expansive scope and consequences.” [C 145 Cong Rec E 1756]

21st Century Department of Justice Appropriations Authorization Act

The 21st Century Department of Justice Appropriations Authorization Act (PL 107-273) signed by President Bush on November 2, 2002, set out to rectify problems of Inter Partes Practice under the AIPA.

¹ Also known as “Providing for Appeals by Third Party in Certain Patent Reexamination Proceedings”

The 21st Century Department of Justice Appropriations Authorization Act provided an Inter Partes Reexamination Requester with a right of participation in any appeal from an adverse determination, be it at the Board of Patent Appeals and Interferences, or on appeal to the District Court and/or Court of Appeals for the Federal Circuit from a decision of the Board of Patent Appeals and Interferences.

The right of participation on appeal is given to "a third-party requester" and applies to:

"any reexamination proceeding commenced on or after the date of enactment of this Act." [Section 13106(d)]

Congress actually gave the right twice. Section 13202(d) reads as follows:

(d) Effective Date.—The amendments made by section 4605 (b) [relating to appeal to the Board of Patent Appeals and Interferences] (c) [relating to appeal to the CAFC] and (e) [relating to appeal by civil action] of the Intellectual Property and Communications Omnibus Reform Act, as enacted by section 1000(a)(9) of Public Law 106-113, shall apply to any reexamination filed in the United States Patent and Trademark Office on or after the date of enactment of Public Law 106-113 [the AIPA].

Repeal by Implication

The broad scope of the right to appeal appears to repeal by implication section 4608 of the AIPA, since a right to appeal implicitly assumes a right to participate in the development of the issues to be appealed.

For example, if a request for Inter Partes Reexamination were filed at a time outside the date limits of section 4608 of the AIPA, sections 13106(d) and 13202(d) of the Justice Department Reauthorization Act would grant a right of appeal to the requester although participation might be considered to be barred by section 4608 under the interpretation taken by the Director of the Office of Patent Legal Administration.

Although the example just given may sound extreme, no less an authority than Harold C. Wegner, former Director of the Intellectual Property Law Program and Professor of Law at the George Washington University Law School and Partner at the firm of Foley and Lardner noted the extraordinary breadth of the right to appeal in his June 3, 2003 submission of comments on the PTO's Notice of Proposed Rulemaking of April 28, 2003. In those comments he said:

"Instead, the 2002 statutory change [to the right of appeal] is –if literally applied– applicable to any reexamination filed on or after November 29, 1999...."

In passing the Justice Department Reauthorization Act, the possibility exists that some members of Congress considered only Title 35, United States Code and not the uncodified section 4608 of the AIPA. This could explain why Members of Congress might assume a right of third-party requesters to participate in Inter Partes Reexamination.

Petitioner respectfully requests that the PTO hold Section 4608 of the AIPA to be repealed by implication and accept the above-described Requests for Inter Partes Reexamination.

INHERENT CONSTITUTIONAL AUTHORITY

The Decision by the Director of the Office of Patent Legal Administration that the Patent and Trademark Office does not have authority under Section 4608 of the AIPA to accept the above-identified Requests for Inter Partes Reexamination is constitutionally questionable.

Article 1, section 8, clause 8 of the United States Constitution states:

Congress shall have power...To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

Congress has defined who is an inventor in 35 U.S.C. §101:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor....

With respect to prior art, the conditions of patentability are set forth in 35 U.S.C. §102 and 35 U.S.C. §103.

What happens when the PTO issues a patent that is invalid based on prior art? There is an improper transfer of ownership from the public (who were, prior to issuance of the patent, able to use the “patented” invention) to private individuals (the “applicants for patent”).

Issuing a patent that is invalid based on prior art is an unconstitutional act because it gives exclusive rights to individuals who are not “inventors” in a Constitutional sense.

Since issuing a patent that is invalid based on prior art is unconstitutional, the PTO has inherent authority to declare such issuance invalid and improper without the need for any

authorizing legislation. Section 4608 may be unconstitutional to the extent it purports to limit an Executive Branch Agency (the PTO) in correcting its own unconstitutional acts.

Petitioner respectfully requests that the PTO utilize its inherent Constitutional Authority to ignore 4608 and accept the above-described Requests for Inter Partes Reexamination.

Petitioner respectfully requests that the PTO hold Section 4608 of the AIPA to be unconstitutional and accept the above-described Requests for Inter Partes Reexamination.

**PARTICIPATION IN EX PARTE REEXAMINATION AND APPEAL UNDER THE 21ST
CENTURY DEPARTMENT OF JUSTICE APPROPRIATIONS AUTHORIZATION
ACT**

Participation In Ex Parte Reexamination May Be Permitted By Waiver Of The Rules

The Director of the Office of Patent Legal Administration denied, in dicta, Petitioner's request that the Patent and Trademark Office waive certain rules in this case if they held that Inter Partes Reexamination would be barred by section 4608 of the AIPA. The Director of the Office of Patent Legal Administration held that this issue should have been raised in a separate petition. A separate petition requesting waiver of 37 C.F.R. §1.535, §1.550(g) and §1.560 under 37 C.F.R. 1.183 is attached hereto. However, in ruling that the PTO has no authority to grant a waiver of the rules, the Director of the Office of Patent Legal Administration established a policy that is incorrect as a matter of law and unnecessarily limits authority of the Undersecretary Of Commerce For Intellectual Property And Director Of The United States Patent And Trademark Office.

The Patent and Trademark Office does have authority to permit a Requester to participate in "Ex Parte" reexamination.

The requirement that "Ex Parte" reexamination under 35 U.S.C. §301-§307 be "Ex Parte" is not statutory². It appears to be a label that was applied after Inter Partes Reexamination was enacted³ to distinguish it from the reexamination procedures under 35 U.S.C. §311-§318.

Reexamination files are open to the public. See 37 C.F.R. 1.11. Therefore it is possible to have reexamination under 35 U.S.C. §301-§307 in which an interested party can submit

² Chapter 30 of Title 35, United States Code

³ Chapter 31 of Title 35, United States Code

comments on each action issued by the Examiner and on each response filed by the applicant.
(The office already sends copies of Office Actions to "Ex Parte" requesters.)

The only prohibition to such a practice might be found in 37 C.F.R. §1.535 and 37 C.F.R. §1.550 (g) [both limiting participation by "Ex Parte" requesters] and §1.560 [limiting participation in interviews].

Therefore, it is possible for "Ex Parte" reexamination under 35 U.S.C. §301-§307 to proceed with Requester participation by waving 37 C.F.R. §1.535, §1.550(g) and §1.560.

The Director of the Office of Patent Legal Administration has taken the position in the decision of June 6, 2003 that the requirement that "*Ex Parte*" Reexamination be *Ex Parte* is a statutory requirement. Statutory requirements cannot be waived, only rules. The Director of the Office of Patent Legal Administration relies on *In re Amp (Amp)*, 212 USPQ 826 (Comr. Pats. 1981) and on *Syntex (U.S.A.) v U.S. Patent and Trademark Office (Syntex)*, 11 U.S.P.Q. 2d 1866 (Fed. Cir. 1989).

Both *Amp* and *Syntex* were prior to the introduction of *Inter Partes* reexamination by the AIPA and prior to the Justice Department Reauthorization Act.

According to the *Amp* decision, at that time:

Neither these sections [37 C.F.R. §1.501(a) and 37 C.F.R. §1.550(e)] nor any provision of the statute provides authority for a third party to a request for reexamination to file a paper directed to the issues of the reexamination proceeding.

Both the statute and the rules have changed since that time and permit a third party to file a "paper directed to the issues of the reexamination."

Syntex was an attempt to revoke a reexamination certificate. The Court said:

We need not analyze the jurisdictional basis asserted for each of *Syntex*'s claims, because all are dependent on *Syntex*'s theory, which we reject, that the patent statute impliedly grants *Syntex*, as a third-party requestor, a right to review of the PTO's final decision, at least in instances where it is alleged that the reexamination proceeding was not conducted in accordance with PTO regulations and established procedures.

That was based on the 1982 edition of title 35, United States Code. Again, both Title 35 and the regulations have changed to permit third party appeals in reexamination cases.

At one point in *Syntex*, the Court stated:

Indeed the statute specifically prohibits further participation by third-party requesters during reexamination. See 35 U.S.C. §305 ("[a]fter the times for filing the statement and reply provided for by section 304 of this title have expired, reexamination will be

conducted according to the procedures established for initial examination"). Thus a reexamination is conducted *ex parte* after it is instituted. See *In re Etter*, 756 F.2d 852, 859 n.6, 225 USPQ 1, 5-6 n.6 (Fed. Cir., cert denied 474 U.S. 828 (1985).

Footnote 6 of *Etter* responds to an argument in the concurring opinion relating to whether a presumption of validity should attach to claims of a patent in reexamination. In *Etter*, the basis for the "*ex parte*" nature of reexamination is stated as follows:

The statute, 35 U.S.C. §305, provides that "reexamination will be conducted according to the procedures established for initial examination under the provisions of sections 132 and 133 of this title." The actual reexamination is conducted *ex parte*. 37 C.F.R 1.550(a) (1983). [Etter, 225 USPQ 1, 4]

The PTO cites *Syntex* as authority for a statutory basis for the *Ex Parte* nature of reexamination, and *Syntex* cites *Etter*, and *Etter* cites a rule, namely 37 C.F.R §1.550(a) (1983). In short, the PTO argument for the statutory nature of a requirement that "*Ex Parte*" reexamination be "*Ex Parte*" is circular. Ultimately, the requirement that "*Ex Parte* reexamination" be *Ex Parte* is based on a rule and such a requirement may be waived.

Petitioner respectfully requests that the PTO, in recognition of Petitioner's right of appeal under the 21st Century Department of Justice Appropriations Authorization Act, permit Requester to participate in reexamination by waiving the rules as requested in the attached petition under 37 C.F.R. §1.183.

Appeal in Ex Parte Reexamination under the 21st Century Department of Justice Appropriations Authorization Act (PL 107-273)

As noted above, Harold C. Wegner, former Director of the Intellectual Property Law Program and Professor of Law at the George Washington University Law School and Partner at the firm of Foley and Lardner, in his June 3, 2003 submission of comments on the PTO's Notice of Proposed Rulemaking of April 28, 2003 said: "Instead, the 2002 statutory change [to the right of appeal] is –if literally applied— applicable to any reexamination filed on or after November 29, 1999...." In context, his comments appear to mean that the right of appeal given by the 21st Century Department of Justice Appropriations Authorization Act applies to both Ex Parte Reexamination and Inter Partes Reexamination.

If the PTO adopts his interpretation, then the PTO has a tool by which it can obtain the benefits of Inter Partes Reexamination without the restrictions of section 4608 of the AIPA. It can simply waive the Rules barring participation and allow appeal under sections 13106(d) and 13202(d) of the 21st Century Department of Justice Appropriations Authorization Act.

Benefits to the PTO

There are several benefits to the Patent and Trademark Office from not allowing section 4608 of the AIPA to gut the remedial purposes of Inter Partes Reexamination.

--Patent and Trademark Office Can Give Complete Relief

Allowing Inter Partes Reexamination to go forward without the restrictions of section 4608 of the AIPA would permit the Patent and Trademark Office to resolve all issues relating to an invention even though the invention is claimed in different patents, some of which may not be within the time period of section 4608 of the AIPA.

Consider Figure 1 of Appendix A. This figure illustrates the relationships among the 8 patents in the family of patents that form the subject matter of this petition. Only the last filed application (S.N. 09/455,409, now patent no. 6,317,592) is eligible under the June 6, 2003 interpretation of the Director of the Office of Patent Legal Administration under section 4608 of the AIPA. Although that patent contained 12 independent claims and 663 dependent claims, the other patents contain 53 independent claims and 1,203 dependent claims. The fact that terminal disclaimers have been filed in 5 of the 8 patents (all except the original three simultaneously filed applications) suggests that many of the claims are not patentably different from the claims in S.N. 09/455,409, now patent no. 6,317,592. It is a strange and bizarre anomaly that would cause the PTO to say "Yes--We can consider 12 independent claims and 663 dependent claims in the context of Inter Partes Reexamination, but we are powerless to consider the other 53 independent claims and 1203 dependent claims, related to the same invention and which are not patentably different." That is a ridiculous outcome that can be avoided by adopting one of the rationales to grant relief presented in this petition.

Granting the relief requested under any of the several rationales presented herein would allow the Patent and Trademark office to correct errors in related patents and thus present a unified posture to the public.

--Economy of Effort

There is an economy of examining effort to be achieved by allowing Inter Partes Reexaminations to be liberally accepted. In the 8 related patents under consideration in this petition, there are 1,921 claims—65 independent and 1,856 dependent. After an order for reexamination enters, the examiner will prepare a first office action on the merits. When the patent owner responds, the examiner will need to determine independently the correctness of the patent owners position on the 1,921 claims. This cannot be done without a significant expenditure of effort on the part of the examiner.

The amount of effort on the part of the examiner can be reduced if the examiner can compare the positions of the patent owner and the requester when considering the patent owner's response. That puts a bound on the issues the examiner must consider. The examiner must still decide the question of patentability independently, but can accept either the patent owner's position or the requester's position or derive from either of them the examiner's own position if the examiner considers neither to be fully acceptable. The amount of time and effort to evaluate 1,921 claims could be considerably reduced if the examiner had both positions before him.

--International Harmonization

Interpreting the Justice Department Reauthorization Act as suggested herein would result in a harmonized practice with other nations. Other industrialized nations permit nullity actions to be prosecuted separately from infringement actions. Permitting liberal Inter Partes Reexamination would bring U.S. Practice into alignment with the practice of other nations.

--Consistency with Title 35 United States Code

Finally, allowing Inter Partes Reexamination to go forward without the restrictions of section 4608 of the AIPA would permit an integration of the reexamination practice with Title 35 of the United States Code. This will do away with the aberration of having an uncodified section of the American Inventor's Protection Act from creating technical difficulties with the reexamination practice.

RETAINED REQUESTS FOR INTER PARTES REEXAMINATION

Although the decisions of May 6, 2003 stated that the Requests for Inter Partes Reexamination were returned with the decisions, in fact, no such Requests were received with the decisions. Accordingly, Petitioners respectfully request that the above-identified Request for Inter Partes Reexamination continue to be retained by the PTO pending a decision on this Petition.

CONCLUSIONS

For the reasons set forth above, Petitioner respectfully requests each of the following remedies:

Remedy 1:

Petitioner respectfully requests that the PTO hold Section 4608 of the AIPA to be repealed by implication and accept the above-described Requests for Inter Partes Reexamination.

Remedy 2:

Petitioner respectfully requests that the PTO utilize inherent Constitutional Authority to override or ignore 4608 and accept the above-described Requests for Inter Partes Reexamination.

Remedy 3:

Petitioner respectfully requests that the PTO, in recognition of Petitioner's right of appeal under the 21st Century Department of Justice Appropriations Authorization Act, permit Requester's participation in reexamination by waiving the rules as requested in the attached petition under 37 C.F.R. 1.183.

Remedy 4:

Petitioner respectfully requests that the PTO hold Section 4608 of the AIPA to be unconstitutional and grant the above-described Requests for Inter Partes Reexamination.

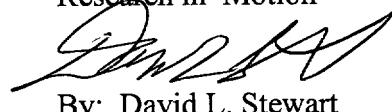
Remedy 5:

Petitioner respectfully requests that the above-identified Request for Inter Partes Reexamination continue to be retained by the PTO pending a final decision on all issues raised by this Petition

Authorization is given to charge Deposit Account **01-0484** for any petition fee or extension of time needed in connection with this paper or for any additional fee required.

Respectfully submitted.

Research in Motion



By: David L. Stewart
Registration No. 37,578

DEPARTMENT OF COMMERCE

Appendix A

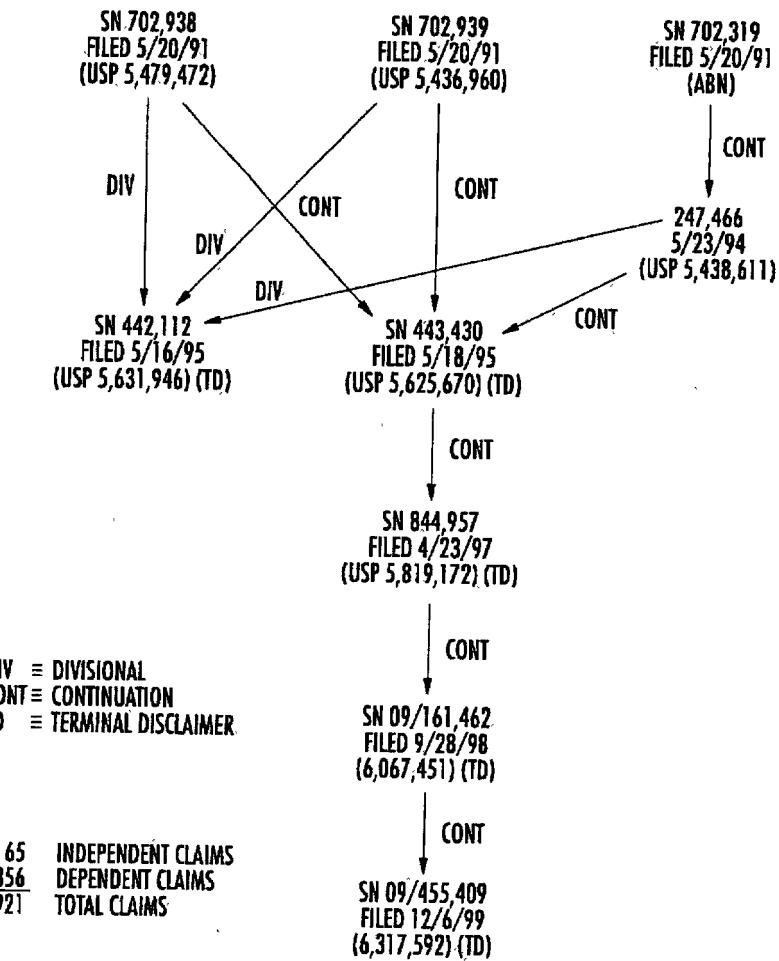


FIG. 1